

### AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A method for inert gas welding or inert gas soldering of workpieces (A) made of steel, aluminum, magnesium, copper or alloys thereof with workpieces (B) made of steel, aluminum, magnesium, copper or alloys thereof, using an additional molten metal alloy, wherein said workpieces (A) and (B) consist of identical or different metals or metal alloys, said method comprising:

- a) abutting or overlapping contacting of the workpieces to be joined;
- b) melting the additional metal alloy containing a Zn base alloy with an electric arc;
- c) applying the molten additional metal alloy on the contact surfaces or partial areas of the contact surfaces of the contacted workpieces;
- d) cooling the joined workpieces;

steps b) and c) being carried out one immediately after the other, with at least steps b) and c) being carried out using an inert gas, wherein the workpieces are joined using additional metal alloys, the melting temperatures of which ranging from 370 to 600 °C.

2. **(Previously presented)** The method according to claim 1, wherein the workpieces of steel consist of galvanized or non-galvanized steel.

3. **(Cancelled)**

4. **(Previously presented)** The method according to Claim 1, wherein the workpieces are joined with or without the use of a fluxing agent.

5. **(Previously presented)** The method according to Claim 1, wherein the Zn base alloy includes from 1 to 25 wt.-% Al.

6. **(Previously presented)** The method according to claim 5, wherein the Zn/Al alloy may include includes one or more of the following alloying additives as single components or in combination: up to 500 ppm Mg, up to 500 ppm Cr, up to 2000 ppm Mn, up to 300 ppm Li, up to 4% Cu, up to 50 ppm B, up to 500 ppm Ti, and up to 1000 ppm Si.

7. **(Cancelled)**

8. **(Previously presented)** The method according to Claim 1, wherein the additional metal alloy is employed in the form of a solid wire or cored wire.

Application No.: 10/549,880  
Serial No.: July 10, 2006

9. **(Previously presented)** The method of Claim 1, wherein said molten additional metal alloy consists of a zinc base alloy including an Al content of from 1 to 25 wt.-%, said additional metal alloy is in the form of a wire having a diameter of from 0.8 to 3.2 mm.

10. **(Previously presented)** The method according to claim 9, wherein the Zn/Al alloy includes one or more of the following alloying additives as single components or in combination: up to 500 ppm Mg, up to 500 ppm Cr, up to 2000 ppm Mn, up to 300 ppm Li, up to 4% Cu, up to 50 ppm B, up to 500 ppm Ti, and up to 1000 ppm Si.

11. **(Previously presented)** The method according to claim 9, wherein said wire is a solid wire or a cored wire.